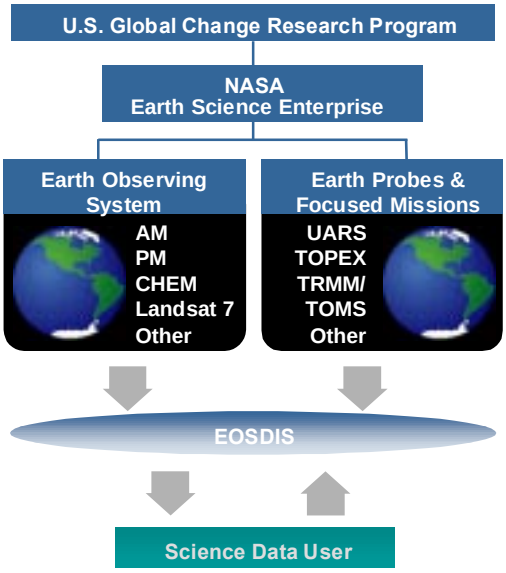
EOSDIS Overview

Highlights

- EOS satellites will provide comprehensive Earth measurements over 15 years.
- At deployment, EOSDIS will be the world's largest unclassified, interdisciplinary Earth science information management system.
- Seven geographically distributed U.S. archives will not only receive, process, and store EOSDIS data, but also distribute the data through a single web interface.
- Raw data will be captured at over 360 gigabytes a day.
- By 2002, archives will contain more than 260 data products, occupying over 3 petabytes.



The Earth Observing System (EOS) Data and Information System (EOSDIS) is part of Earth Science Enterprise (ESE), NASA's contribution to the United States Global Change Research Program (USGCRP). The EOS program consists of a series of Earth remote sensing spacecraft, which are designed to operate as an "observing constellation" for a period of 15 years. The first launch took place in April 1999. Satellite remote sensing systems will provide the integrated, comprehensive, long-term global Earth measurements necessary for understanding the global environmental system.

With EOSDIS' unprecedented store of information, users with diverse needs may study the atmosphere, oceans, cryosphere, biosphere, and solid Earth. By comparing new data from the suite of EOS satellites with historical data stored in archives worldwide, it becomes possible to explore and more closely understand the relationships among the various components of the Earth system.

EOSDIS distinguishes itself from most current remote sensing data systems because of its ability to command and control a suite of satellites, and to process and distribute immense amounts and varieties of scientific data to scientists, educators, governments, businesses, and the general public. By 2002, EOSDIS will be capturing raw instrument data from a variety of satellites at a rate of more than 360 gigabytes per day. After processing, the volume of archived data and related products will grow in size to be measured in petabytes 1 petabyte = 10^9 megabytes) during the 15 year lifetime of EOSDIS.

Though EOSDIS data are distributed through multiple archives, it will all be accessible through a single World Wide Web interface by thousands of users simultaneously. EOSDIS is designed to grow as the amount of data and the number of users increase, and to continuously provide timely, comprehensive information.

EOSDIS welcomes and encourages collaborative research and development partnerships with businesses and industries in areas such as agriculture, fishing, forestry, mineral extraction, and insurance, to transform this wealth of data into practical, reusable applications.

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